

**Claims**

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1. Method for operating a push-to-talk communication between a PoC-group consisting of at least of one member of a first communication network and a PoC-group consisting of at least of one member of a second communication network, using a PoC application server in each communication network,

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characterised by the steps of:

- connecting the members of the PoC-group of the first network operator with the members of the PoC-group of the second network operator,
- synchronising the PoC application servers to each other.

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2. Method for operating a push-to-talk communication according to claim 1, characterised by the steps of:

- connecting the members of the PoC-group of the first network operator from the side of the second network operator,
- connecting the members of the PoC-group of the second network operator from the side of the first network operator, and
- synchronising the PoC application servers to each other.

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3. Method for push-to-talk communication between the members of an existing push-to-talk communication session and a group of an additional communication network, using a PoC application server in each communication network, characterised by the steps of:

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- connecting the additional group to each of the existing groups of the session, and

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- synchronising the PoC application server of the additional group to the previously synchronised PoC application servers.

4. Method for operating a push-to-talk communication according to any of claims 1 to 3, characterised in that the PoC application server of the additional group is identified by an address derived from the group address.
5. Method for operating a push-to-talk communication according to any of claims 1 to 4, characterised in that the synchronisation is carried out automatically by the PoC application servers.
6. Method for operating a push-to-talk communication according to any of claims 1 to 4, characterised in that the synchronisation is carried out whenever a user requests update of all group members of the PoC groups before sending a PoC message.
7. System for push-to-talk communication between push-to-talk groups of at least two communication networks, characterised by one common group management system (6) and at least one subsystem for each network operator consisting of at least one Push-to-Talk communication application server (4, 14).
8. System according to claim 7, characterised in that the communication networks are radio communication networks.